LAW ENFORCEMENT ASSISTANCE NETWORK

Protocols for Mutual Aid Communications and Fleetmapping Procedures

(Version 3.72 – November 12, 2001)

CONTENTS

EXECUTIVE OVERVIEW

Law Enforcement agencies in San Diego County are increasingly dealing with incidents that cross jurisdictions and require a multi-agency response. The region-wide nature of these events mandates that all agencies have the ability to communicate by radio and coordinate their efforts quickly and clearly.

A regional law enforcement communications committee called the Law Enforcement Assistance Network (LEAN) was re-convened to examine these issues. The committee was comprised of members of most local law enforcement agencies, both current RCS users and Non-RCS users.

The results of the committee's work include an analysis of inter-agency communications, RCS talkgroup changes, fleetmapping standards, and a set of mutual aid and pursuit communication protocols.

INTER-AGENCY COMMUNICATIONS
By consulting with committee participants from most local agencies, we were able to map out the details of inter-agency communications. The identified communications paths served as a basis for developing the recommended changes and protocols.

TALKGROUP NAME CHANGES
While examining the current state of communications we identified changes, which would simplify the system for the end user. By renaming **'LE SD CMD'** to **'BLUE 1'** and **'CLEMARSV'** to **'BLUE 2'** we will reduce confusion with other talkgroup names. The 'BLUE' talkgroups will be used primarily for pursuits, spontaneous tactical mutual aid incidents and BOLs. LEAN recommends that '**BLUE 1'** and '**BLUE 2'** be programmed in the primary zone, in the last two modes, to provide easy access by field units.

RECOMMENDED LAW ENFORCEMENT FLEETMAPPING STANDARDS
Based on the experiences of committee participants and the standard protocols for mutual aid, we are making recommendations for fleetmapping standards. These recommendations include:
- Requiring specific mutual aid talkgroups in every RCS radio.
- Recommending additional mutual aid talkgroups.
- Allowing agencies to determine their needs for other agencies' talkgroups.
- Recommending mutual aid talkgroups for non-RCS users.

RECOMMENDED MUTUAL AID and PURSUIT COMMUNICATION PROTOCOLS
LEAN protocols address the following mutual aid situations:

- Regional and Countywide BOLs
    - BOLs will be broadcast using regional or countywide mutual aid talkgroups in order to disseminate information faster and more reliably

- Static Mutual Aid Incidents (11-99's, etc)
    - Static Mutual Aid incidents will be patched to the regional command talkgroup in order to allow other agencies to communicate while assisting

- Mutual Aid Pursuits
    - Mutual aid pursuits will also be patched to the regional command talkgroup, allowing other agencies to communicate while assisting. If the pursuit approaches the border of an RCS region (North, South, or East), the pursuit will be moved to 'BLUE 1' or 'BLUE 2' in order to maintain communications, regardless of geographic location.

The recommended protocols conform to the countywide pursuit policy. Each protocol was carefully crafted to address issues including:

- Ease of use for field units and dispatchers
- Ability to include both RCS and NON-RCS users
- Maximum effectiveness and efficiency of shared resources
- Minimum radio system impact.

CONCLUSIONS

It is the LEAN committee's opinion that these protocols meet the objectives of: *Ease of use for both field and dispatch personnel, Maximum effectiveness and efficiency of shared resources, Minimum system impact, Focused talkgroup planning, and Need driven direct inter-agency connectivity.* We recommend all law enforcement agencies in San Diego County adopt these recommendations as policy and procedures within their agency.

Protocols for Mutual Aid Communications and
Fleetmapping Procedures

INTRODUCTION

Law Enforcement agencies in San Diego County are increasingly dealing with incidents that cross jurisdictions and require a multi-agency response. The region-wide nature of these events mandates that all agencies have the ability to communicate by radio and coordinate their efforts quickly and clearly.

The challenge is to gain radio connectivity between agencies that are served by several independent radio systems. The Regional Communications System (RCS) has provided a shared system which helps link many agencies together, but there is need to link to all the others.

Over the past two years the RCS radio system has expanded considerably. As system usage expands we must continually re-examine the operational communication and radio needs of law enforcement agencies in San Diego County. The Law Enforcement Assistance Network (LEAN) was established to address these issues. The committee is comprised of members of most local law enforcement agencies, both current RCS and Non-RCS agencies.

As a committee our goals were the following:
- Examine law enforcement communication and radio usage needs
- Determine the capabilities of the RCS to accommodate those needs
- Determine the capabilities of other communications systems serving San Diego County and their ability to inter-operate with the RCS
- Determine how to facilitate inter-agency communication
- Recommend standards for RCS customer fleetmaps
- Recommend standard protocols for mutual aid incidents within the county

The committee used the following overarching concepts as landmarks to guide the development of each recommendation:
- Ease of use for both field and dispatch personnel
- Maximum effectiveness and efficiency of shared resources
- Minimum radio system impact
- Focused talkgroup planning
- Need driven direct inter-agency connectivity

INTER-AGENCY COMMUNICATIONS

While the RCS is providing unprecedented communications capabilities between RCS agencies, we also need to consider how to facilitate communications with others that are not on the system. To assist in this effort, most law enforcement agencies in the county were invited to attend the LEAN committee meetings. By consulting with committee participants we were able to map out the details of inter-agency communications. We recognize identifying the technical details of this inter-communication is an ever changing and fluid process and we will continue to address these issues with all agencies through the committee process. This information is also laid out in the diagram that follows.

SDPD

SDPD has the ability to patch to nearly any talkgroup in the RCS through talkgroups called RCS/City 1 and RCS/City 2. SDPD Dispatch also has the **'LAW CC'** talkgroup in their consoles to allow for Comm Center to Comm Center communications.

RCS agencies have the option of requesting the addition of the following five resources to their consoles:

- **RCS/City 1** – Microwave patch resource - to be patched by RCS dispatcher and SDPD dispatcher to talkgroups on each system. (First and best choice)
- **RCS/City 2** – Microwave patch resource - to be patched by RCS dispatcher and SDPD dispatcher to talkgroups on each system. (Back-up to RCS/City 1)
- **'SD MA10'** - The SDPD designated pursuit and BOL talkgroup.
- **'SDPD1'** - Can be set to any talkgroup in the SDPD patrol fleetmap upon request to the SDSO dispatch center
- **'SDPD2'** - Can be set to any talkgroup in the SDPD patrol fleetmap upon request to the SDSO dispatch center

CHP / BORDER PATROL / OCEANSIDE PD

The California Highway Patrol may be patched to any RCS talkgroup through a multi-layered patch using the BORTAC patch. While this patch is somewhat more complicated and time-consuming to set up, it is the most effective patch to field units and dispatchers from CHP. There is also a geographical limitation with the CHP BORTAC patch – the BORTAC frequency is generally ineffective in the eastern portions of the county, including east of the Highway 125 in the La Mesa area.

The US Border Patrol (and some other federal agencies) may be connected to RCS agencies through a full-time patch between their VHF channel **SDC-1** and **County Tac 1**. Dispatchers may patch **County Tac 1** to the talkgroup the units involved are operating on, creating a highly effective patch between the two agencies.

The Oceanside Police Department, operating on their VHF system, may be patched through console resources located at the Carlsbad Police Department, and at Sheriff's Communications. Either of those dispatch centers is capable of patching talkgroups to Oceanside Police's primary frequency.

All of the above agencies can use **CLEMARS VHF** to communicate with RCS users. All RCS dispatch centers (including SDSO) have the ability to patch **CLEMARS VHF** on their local consoles.

NATIONAL CITY / HARBOR POLICE

These agencies have the ability to have field units move to county mutual aid talkgroups directly. Since they cannot scan their local systems along with the RCS talkgroups, they must be notified via telephone when incidents occur that they should be aware of.

BORTAC

BORTAC can also be utilized to setup patches between these and other local as well as state and federal agencies. All RCS agencies will, in the future, have the ability to patch with BORTAC from their local consoles. In the meantime, RCS dispatchers can request that SDPD dispatchers set up BORTAC patch between the outside agency, e.g., CHP, and RCS/City 1. The RCS dispatcher can then create a patch between RCS/City 1 and the necessary talkgroup(s).

COUNTY RADIO RESOURCES DIAGRAM

RECOMMENDED TALKGROUP CHANGES

While examining the current state of communications we identified some changes, which would simplify the system for the end user:

- Rename **'LE SD CMD'** to **'BLUE 1'**. The 'BLUE' is an easily recognized name, which will help reduce confusion with other talkgroups. It will be used primarily for pursuits, spontaneous tactical mutual aid incidents and BOLs.
- Rename **'CLEMARSV'** to **'BLUE 2'**. This will become a secondary county wide mutual aid talkgroup.

RECOMMENDED LAW ENFORCEMENT FLEETMAPPING STANDARDS

Based on the experiences of committee participants, who have been designing fleetmaps for the past two years, and the standard protocols for mutual aid, we are making the following recommendations for fleetmapping standards.   Please refer to the Law Enforcement fleetmap programming template for additional information.

REQUIRED Talkgroups and zones in all RCS radios:
- **CMA Zone** – County Mutual Aid
- **TRF Zone** – Transportable Radio Facility
- **CNV Zone** – Conventional Resources
- **'BLUE 1'** – recommended in primary zone, in last mode
- **'BLUE 2'** – recommended in primary zone, second to last mode

RECOMMENDED Talkgroups:
- **Local Area Command and Tactical** – **'LE N CMD'**, **'LE S CMD'**, or **'LE E CMD'** and at least 1 associated TAC recommended in the primary zone.
- **'CO CALL'** and **'CO TAC1'** – recommended in primary zone

OPTIONAL Talkgroups:
Agencies may program other agency's talkgroups with written authorization. Talkgroup selection should be 'need driven.'   There are other options available on the RCS system for mutual aid communications that may be utilized instead of or in addition to programming specific talkgroups.

Non-RCS Agency Recommendations
We also recommend that non-RCS customers program the following talkgroups to facilitate multi-agency operations. These are available, for mutual aid use, to all county law enforcement agencies at no charge.
- **'BLUE 1'** – recommended in primary zone in last mode
- **'BLUE 2'** – recommended in primary zone second to last mode
- **Local Area Command and Tactical** – **'LE N CMD'**, **'LE S CMD'**, or **'LE E CMD'** and at least 1 associated TAC recommended in the primary zone.
- **CMA Zone** – County Mutual Aid
- **CNV Zone** – Conventional Resources

When planning a fleetmap, agencies should keep in mind the RCS will schedule reprogramming of all the radios approximately every 24 months (as system wide changes dictate). Non-scheduled reprogramming requests by agencies (such as to add a new talkgroup for a neighboring agency) may be subject to additional cost.

Many individuals are available from area agencies to assist in fleetmap development.   We encourage agencies to draw on these resources.

LAW ENFORCEMENT FLEETMAP TEMPLATE

RECOMMENDED MUTUAL AID and PURSUIT COMMUNICATION PROTOCOLS

There are many situations that require mutual aid assistance. It is critical to facilitate communications during these situations. Based on experiences and the technical capabilities of the RCS, LEAN is making the following recommendations for mutual aid protocol standards. These recommendations conform to the countywide pursuit policy. A diagram follows each protocol to provide a graphic explanation.

Regional Areas (diagram 1)
The RCS radio system is divided in to 3 regional areas: North, South, and East. Each talkgroup in the system is programmed to work in a specific area. For instance, your local talkgroups are programmed only to work in the regional area in which your city is located (north, south, or east area). Some talkgroups are programmed to be wide area. They include **'BLUE 1'**, **'BLUE 2'**, and **'CO CALL'** and associated CO TACs.

Dividing Lines (diagram 1)

- *NORTH and SOUTH - The approximate dividing line for the North and South areas is Highway 52.*

- *EAST - The dividing line for the eastern Intelli-Repeater areas runs from Valley Center to Ramona, Alpine, and Otay Lake.*

Command and Tactical Talkgroups (diagram 2)
Command or CMD talkgroups are to be used for one of the following:

- **Emergency Communications** - Pursuits, BOLS

- **Hailing (contacting) another agency/unit** - Contact and immediately move to a tactical

Command (CMD) talkgroups should never be used for non-emergency conversations, other than hailing a dispatcher or a field unit from another agency. Once you have hailed another agency or unit on CMD, immediately switch to a free tactical to have your conversation. The following are examples of proper CMD and TAC use:

- **EMERGENCY COMMUNICATIONS** – Use CMD as the primary talkgroup for the situation. The CMD can be patched to other talkgroups as needed. Once the situation is under control and the emergency has ended, units should move to an area TAC to continue communicating

- **MAKING EMERGENCY BROADCAST** - Use CMD for communicating with multiple units during an emergency situation or to broadcast a BOL

- **HAILING FIELD UNITS or DISPATCH CENTERS** - Use CMD to hail another field unit, immediately switch to a TAC to have a conversation.

RCS REGIONAL AREAS DIAGRAM

COMMAND TALKGROUPS AND TACTICALS

MAINTENANCE OF COORDINATION

Generally, during a pursuit with the involvement of multiple agencies, the dispatcher from the originating agency will maintain communication coordination for the incident. The communication coordination may be handed off to another agency at the request of the originating agency. (In order to avoid interruption of multi-agency radio transmissions in the middle of an incident, the originating agency will continue to monitor the pursuit and maintain or add any patches required for radio connectivity. This responsibility should not be transferred without a significant need within the originating agency.) The need for transferring the coordination responsibility may be the result of a number of considerations, which may include but are not limited to the following:

1.   When technology limitations dictate. (e.g., CHP cannot be patched and is out of range of BORTAC when east of Highway 125.)
2.   The originating agency communications center requires the support of additional resources.
3.   Tactics are enhanced.
4.   Other considerations that evolve.

TRANSFER OF COORDINATION

In the event an agency's dispatch center is unable to maintain dispatch coordination of a law enforcement mutual aid incident, that agency may contact another dispatch center and request that agency assume the coordination of the incident. The agency may make this request via telephone, or via radio system. The request should be made using the following example verbiage:

"{*Escondido PD*} to {*Sheriff's Dispatch*}, request you assume coordination of this incident."

If the agency is able to assume coordination of the incident, they should respond as follows:

"{*Sheriff's Dispatch*}, 10-4. We are assuming coordination of the incident."

If the agency is unable to assume dispatch coordination of the incident, they should respond as follows:

"{*Sheriff's Dispatch*} to {*Escondido PD*}, negative. We are unable to assume coordination."

The originating agency will respond as follows:

"{*Escondido PD*}, 10-4. We are maintaining coordination."

Regional and County Wide BOL Broadcasts (Diagram 3)

A BOL broadcast can be made by either a field unit or by dispatch. If a field unit makes a broadcast that unit is then available to answer any questions that other units may have.

SELECTING A TALKGROUP
Upon request from a field unit, one of the following talkgroups should be patched and multi-selected to the primary talkgroup:

- **'BLUE 1'** - *Blue 1 should be selected if all agencies in the county should be made aware of the incident, regardless of their geographic locations.*
                                            or,
- **'LE S CMD'** or **'LE N CMD'** or **'LE E CMD'** - *One of the local area commands should be chosen if the information is relevant only to agencies in the associated regional area.*

The proper talkgroup for the BOL should be selected based on:
1. The geographic area in which the incident happened
2. The potential of the participants to cross area boundaries (north, south, east)
3. The time delay since the incident occurred

TONE and PRE-ANNOUNCEMENT
Regardless of whether the BOL is to be broadcast by the dispatcher or the field unit, the dispatcher will use a steady tone (Tone #1 on RCS Elite consoles), approximately one second in duration and then pre-announce the BOL. The pre-announcement should be similar to:

"[tone...] Standby for a BOL regarding _____   from Coronado PD unit ___ ..."

BOL INFORMATION
The actual BOL should include ALL of the relevant information, including , but not limited to, agency broadcasting the BOL, the reason for the BOL, location of incident, description of people or vehicles, direction of travel ,and time delay. This will assist other agencies in determining the proper response to the BOL.

BOL from VISIO

Static Mutual Aid Incidents (diagram 4)

A static incident is an incident, such as an 11-99, which is not likely to leave the regional area in which it is occurring. For static incidents, the field units will remain on their local talkgroup until told to change. The dispatcher will prepare to patch an area command talkgroup to the local talkgroup. The originating agency's dispatcher will coordinate the incident until it ends or they relinquish coordination to another agency.

Incidents starting on a mutual aid talkgroup (like **'LE S CMD'** or **'BLUE 1'**) will stay on that talkgroup and will initially be coordinated by any RCS Communications Center that acknowledges the unit.   The acknowledging agency will continue to coordinate the incident until it becomes appropriate to transfer the event to the agency of jurisdiction.

*PATCH AREA COMMAND (***'LE N CMD'*** or ***'LE S CMD'*** or ***'LE E CMD'***)*
When regional mutual aid resources are needed and at the discretion of the dispatcher and/or Watch Commander (as dictated by agency policy), a patch will be made to the area command. Additional units can then join on the area command.

The dispatcher will use steady tone (Tone #1 on RCS Elite consoles), approximately one second in duration, to alert and then pre-announce the patch and identify the situation. The pre-announcement and tone will be simulcast on **'BLUE 1'** to notify all county units of the situation. Then the local talkgroup is patched to the area command talkgroup.

Non-RCS cities will have to rebroadcast information (if possible) on the area command if they do not have the ability to patch their dispatch with the area command and if their the field units cannot move to the area command.

When the urgency of the incident has been sufficiently reduced (e.g., suspects are all in custody, and units on scene are simply directing traffic, awaiting tow trucks, etc.), field units are moved to an appropriate local TAC, or if other assistance is still required, to an area TAC. The patch with the area CMD is then removed.

Static from visio

Pursuits (diagram 5)

For pursuits, field units from the initiating agency will remain on their local talkgroup. The dispatcher will prepare to patch a command talkgroup. The originating agency's dispatcher will coordinate the incident until it ends or they relinquish coordination to another agency.

Incidents starting on a mutual aid talkgroup (like **'LE S CMD'** or **'BLUE 1'**) will stay on that talkgroup and will initially be coordinated by any RCS Communications Center that acknowledges the unit. The acknowledging agency will continue to coordinate the incident until it becomes appropriate to transfer the event to the agency of jurisdiction.

*PATCH AREA COMMAND ('**LE N CMD**' or '**LE S CMD**' or '**LE E CMD**')*
When mutual aid resources are needed or the pursuit approaches city boundaries and at the discretion of Dispatcher and /or Watch Commander (as dictated by agency policy), a patch will be made to the area command.

The dispatcher will use steady tone (Tone #1 on RCS Elite consoles), approximately one second in duration, to alert and then pre-announce the patch and identify the situation. The local talkgroup is then patched to a regional command talkgroup. Field units from the initiating agency will remain on their local talkgroup. Allied agencies' units will join the pursuit on the area command talkgroup.

*MOVE ALL UNITS TO '**BLUE 1**'*
When the pursuit approaches area boundaries and at the discretion of the dispatcher and/or Watch Commander (as dictated by agency policy) all units change to **'BLUE 1'** (or **'BLUE 2'**, if **'BLUE 1'** is already in use). The fleetmap recommendations are designed to provide easy access to these talkgroups.

The dispatcher will use a steady tone (Tone #1 on RCS Elite consoles), approximately one second in duration, pre-announce the talkgroup change, and then instruct all units to change mobile and portable radios to **'BLUE 1'**. The dispatcher must ensure that patches to non-RCS agencies through **RCS/City 1** (or other resources) are then patched to **BLUE 1** to maintain communications with those units.

At this point all RCS field units will change both mobile and (when safe/practical) portable radios to **'BLUE 1'.** The originating agency continues the dispatch coordination of the pursuit, while agencies' watch commanders maintain operational control of their involved units. Dispatchers from other agencies should remain off the air unless requested to assist by the coordinating agency. Once an incident is moved to **'BLUE 1'** there will be no further talkgroup changes until the incident is resolved.

The patch between the local talkgroup and the area command is released when practical.

When the urgency of the incident has been sufficiently reduced (e.g., suspects are all in custody, and units on scene are simply directing traffic, awaiting tow trucks, etc.), dispatch will move all units to the appropriate area TAC (based on the geographic area of the termination point.) A local TAC may be patched with the area TAC to allow local supervisors to communicate with units still on scene.

Pursuits from visio

FUTURE PLANS

The committee is developing two training videos that will assist in training all county agencies in the protocols that we have developed. One video will be focused on the procedures for field units, and the other on the procedures for dispatchers. By utilizing an in-service video training approach, we can quickly and accurately disseminate this information.

The LEAN committee will continue to meet with all interested area agencies to address future inter-agency communication and policy issues within the county.

CONCLUSIONS

It is the LEAN committee's opinion that the recommendations provided meet the objectives of: *Ease of use for both field and dispatch personnel, Maximum effectiveness and efficiency of shared resources, Minimum system impact, Focused talkgroup planning, and Need driven direct inter-agency connectivity*. We recommend all law enforcement agencies in San Diego County adopt these recommendations as policy and procedures within their agency